

REMARKS


The specification has been amended to provide a cross-reference to the previously filed International Application. The claims have also been amended to delete improper multiple dependencies and to place the application into better form for examination. Entry of the present amendment and favorable action on the above-identified application are earnestly solicited.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By

  
Raymond C. Stewart, #21,066

RCS/rem  
0032-0261P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

(Rev. 02/12/01)

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

The Specification has been amended to provide cross-referencing to the International Application.

The claims have been amended as follows:

7. (Amended) The method for typing of the HLA class I alleles claimed in[clims 5 or 6] claim 5, wherein the temperature for washing after hybridization of the amplified products by the PCR method with the immobilized DNA probes and/or after the binding reaction of the label of the amplified products with the enzyme-conjugate is room temperature.

8. (Amended) The method for typing of the HLA class I alleles claimed in[any one of claims 1 to 7] claim 1, wherein the amino-modified DNA probe which can specifically hybridize with at least one specific HLA-A allele, at least one specific HLA-B allele or at least one specific HLA-C allele, is selected from the group consisting of A98T (SEQ ID No.:1), A98A (SEQ ID No.:2), A160A (SEQ ID No.:3), A239A (SEQ ID No.:4), A238A (SEQ ID No.:5), A240T (SEQ ID No.:6), A257TC (SEQ ID No.:7), A259AC (SEQ ID No.:8), A270T (SEQ ID No.:9), A282C (SEQ ID No.:10), A290T (SEQ ID No.:11), A299T (SEQ ID No.:12), A302G (SEQ ID No.:13), A355G (SEQ ID No.:14), A362TA (SEQ ID No.:15), A362TT (SEQ ID No.:16), A368A (SEQ ID No.: 17), A368G (SEQ ID No.: 18), A368T (SEQ ID No.: 19), A402G (SEQ ID No.:20),

A423T (SEQ ID No.:21), A448C (SEQ ID No.: 22), A485A (SEQ ID No.:23), A524G (SEQ ID No.:24), A526T (SEQ ID No.:25), A527A (SEQ ID No.:26), A538CG (SEQ ID No.:27), A539A (SEQ ID No.:28), A539T (SEQ ID No.:29), A555T (SEQ ID No.:30), A559G (SEQ ID No.:31), A570CG (SEQ ID No.:32), A570GT (SEQ ID No.:33), A779A (SEQ ID No.:34), A843A (SEQ ID No.:35), BL1 (SEQ ID No.:36), BL3 (SEQ ID No.:37), BL4 (SEQ ID No.:38), BL5 (SEQ ID No.:39), BL9 (SEQ ID No.:40), BL10 (SEQ ID No.:41), BL11 (SEQ ID No.:42), BL24 (SEQ ID No.:43), BL25 (SEQ ID No.:44), BL34 (SEQ ID No.:45), BL35 (SEQ ID No.:46), BL36 (SEQ ID No.:47), BL37 (SEQ ID No.:48), BL38 (SEQ ID No.:49), BL39 (SEQ ID No.: 50), BL40 (SEQ ID No.:51), BL41 (SEQ ID No.:52), BL42 (SEQ ID No.:53), BL56 (SEQ ID No.:54), BL57 (SEQ ID No.:55), BL78 (SEQ ID No.:56), BL79 (SEQ ID No.:57), BL222A (SEQ ID No.: 58), BL272GA (SEQ ID No.:59), BL226G (SEQ ID No.:60), BL292G (SEQ ID No.:61), BL292T (SEQ ID No.:62), BL361G (SEQ ID No.:63), BL409T (SEQ ID No.:64), BL512T (SEQ ID No.:65), BL538CG (SEQ ID No.:66), BL538G (SEQ ID No.:67), CC (SEQ ID No.:68), A-12 (SEQ ID No.:69), A-2 (SEQ ID No.:70), A-3 (SEQ ID No.:71), A-4 (SEQ ID No.:72), A-54 (SEQ ID No.:73), B-1 (SEQ ID No.:74), B-2 (SEQ ID No.:75), C-12 (SEQ ID No.:76), C-24 (SEQ ID No.:77), C-33 (SEQ ID No.:78), C-43 (SEQ ID No.:79), 134-g (SEQ ID No.:80), 134-A2 (SEQ ID No.:81), 353TCA1 (SEQ ID No.:82), 343A (SEQ ID No.:83), A34 (SEQ ID No.:100), A282CT (SEQ ID No.:101), A290TF (SEQ ID No.:102), A302GR (SEQ ID No.:103), A414A (SEQ ID No.:104), A468T (SEQ ID

No.:105), A489A (SEQ ID No.:106), A502C (SEQ ID No.:107), A538TG (SEQ ID No.:108), BL39R (SEQ ID No.:109) B150 (SEQ ID No.:110), BL77 (SEQ ID No.:111), BL272A (SEQ ID No.:112), BL263T (SEQ ID No.:113), BL527A (SEQ ID No.:114), BL570GT (SEQ ID No.:115), RA-2 (SEQ ID No.:116), RA-41 (SEQ ID No.:117), RB-28 (SEQ ID No.:118), 201g1 (SEQ ID No.:119), C206gR (SEQ ID No.:120), R341A (SEQ ID No.:121), R343g3 (SEQ ID No.:122), 353TCC (SEQ ID No.:123), 361T1 (SEQ ID No.:124), 361T368g (SEQ ID No.:125), 361T368T1 (SEQ ID No.:126), 369C (SEQ ID No.:127), 387g1 (SEQ ID No.:128), 526AC2 (SEQ ID No.:129), 538gAC (SEQ ID No.:130), complementary strands thereof and nucleic acids which comprises one to several bases are deleted from or added to the end of them.

9. (Amended) The method for typing of the HLA class I alleles claimed in [any one of claims 1 to 8] claim 1, which comprises primers capable of amplifying all the HLA-A alleles, all the HLA-B alleles or all the HLA-C alleles, or primers specific to the common sequence to alleles of the specific group consisting of the specific HLA-A alleles or the specific HLA-B alleles, is selected from A2-5T (SEQ ID No.:84), A3-273T (SEQ ID No.:85), A4-8C (SEQ ID No.:86), A4-254G (SEQ ID No.:87), BASF-1 (SEQ ID No.:88), BASR-1 (SEQ ID No.:89), CGA011 (SEQ ID No.:90), CGA012 (SEQ ID No.:91), Ain3-66C (SEQ ID No.:92), 5BCIn37-34C (SEQ ID No.:96), 5BCIn37-24g (SEQ ID No.:97), and 5BCIn37-34g2 (SEQ ID No.:99).

12. (Amended) A kit for typing of the HLA class I alleles, which is used for the method claimed in[any one of claims 1 to 9] claim 1.

13. (Amended) A reagent for typing of the HLA class I alleles, which is used for the method claimed in[any one of claims 1 to 9] claim 1.

21. (Amended) (Added) The method claimed in[any one of claims 18 to 20] claim 18, wherein the probes are hybridized with amplified products by the PCR method.

23. (Amended) (Added) The method claimed in[any one of claims 18 to 22] claim 18, wherein nucleic acids are hybridized with the probes immobilized on a support.

24. (Amended) (Added) The method claimed in[any one of claims 21 to 23] claim 21, which comprises hybridizing the amplified products obtained by the PCR method with the immobilized DNA probes, adding an enzyme-conjugate which specifically bonds to a label of the amplified products thereto at the same time or after the hybridization, and adding a chromogenic substrate, a luminescent substrate or a fluorescent substrate to the mixture, to

detect as signals whether or not the amplified products are hybridized with the immobilized DNA probes.